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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,769	10/30/2006	Chang Jean Jung	05-431-B	5162

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EXAMINER	
NGUYEN, TUAN HOANG	
ART UNIT	**PAPER NUMBER**
2618	
MAIL DATE	**DELIVERY MODE**
11/26/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/560,769	JUNG, CHANG JEAN	
	Examiner	Art Unit	
	TUAN H. NGUYEN	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see applicant's remarks, filed on 08/04/2008, with respect to the rejection(s) of claims 1-4 under 35 U.S.C § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made over Arend et al. (US PUB. 2002/0102968 hereinafter, "Arend") in view of Chung et al. (U.S PAT. 6,005,889 hereinafter, "Chung").

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arend et al. (US PUB. 2002/0102968 hereinafter, "Arend") in view of Chung et al. (U.S PAT. 6,005,889 hereinafter, "Chung").

Consider claim 1, Arend teaches a CDMA signal generator comprising: an additive white Gaussian noise generator for generating a first broad band noise in an RF receiving band (page 2 [0021] and [0023]).

Arend does not explicitly show that a first signal generator for generating a first conversion frequency signal; a first mixer for mixing the first broad band noise in the RF receiving band with the first conversion frequency signal to provide a second broad band noise in an IF band, said IF band including a CDMA band and a remaining frequency band that is exclusive of the CDMA band; a SAW filter for attenuating a third broad band noise in the remaining frequency band within the IF band to a predetermined level to provide a substantially CDMA band noise; a second signal generator for generating a second conversion frequency signal; and a second mixer for mixing the substantially CDMA band noise from the SAW filter with the second conversion frequency signal from the second signal generator to provide an output.

In the same field of endeavor, Chung teaches a first signal generator (214) for generating a first conversion frequency signal (fig. 2 col. 4 line 58 through col. 5 line 15); a first mixer (206) for mixing the first broad band noise in the RF receiving band with the first conversion frequency signal to provide a second broad band noise in an IF band, said IF band including a CDMA band and a remaining frequency band that is exclusive of the CDMA band (fig. 1 col. 15 line 47 through col. 16 line 7); a SAW filter for attenuating a third broad band noise in the remaining frequency band within the IF band to a predetermined level to provide a substantially CDMA band noise (fig. 1 col. 15 line 47 through col. 16 line 7); a second signal generator (214) for generating a second conversion frequency signal (fig. 2 col. 4 line 58 through col. 5 line 15); and a second mixer (210) for mixing the substantially CDMA band noise from the SAW filter with the

second conversion frequency signal from the second signal generator to provide an output (fig. 2 col. 4 line 58 through col. 5 line 15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, a first signal generator for generating a first conversion frequency signal; a first mixer for mixing the first broad band noise in the RF receiving band with the first conversion frequency signal to provide a second broad band noise in an IF band, said IF band including a CDMA band and a remaining frequency band that is exclusive of the CDMA band; a SAW filter for attenuating a third broad band noise in the remaining frequency band within the IF band to a predetermined level to provide a substantially CDMA band noise; a second signal generator for generating a second conversion frequency signal; and a second mixer for mixing the substantially CDMA band noise from the SAW filter with the second conversion frequency signal from the second signal generator to provide an output, as taught by Chung, in order to provide CDMA output signal with little additional processing.

Consider claim 2, Arend further teaches output is usable as a test input signal to an RF block unit (page 2 [0022]).

Consider claims 3 and 4, the examiner takes “Official Notice” of the fact that is notoriously well-known in the art to a passband of SAW filter is **about** 1.25 MHz and **about** 5 MHz, in order to provide the one-sided bandwidth of the CDMA signal is 0.6144

MHZ, so the digital signal from A/Ds is sampled at the minimum data rate of 1.2288 MHZ to satisfy sampling theory requirements.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, a passband of SAW filter is **about** 1.25 MHz and **about** 5MHz within Chung reference such that the one-sided bandwidth of the CDMA signal is 0.6144 MHZ, so the digital signal from A/Ds is sampled at the minimum data rate of 1.2288 MHZ to satisfy sampling theory requirements (col. 5 line 21-24).

Conclusion

4. Any response to this action should be mailed to:

Mail Stop_____ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571) 272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information Consider the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tuan Nguyen/
Examiner
Art Unit 2618

/Nay A. Maung/
Supervisory Patent Examiner, Art Unit 2618